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09/768,072	01/23/2001	Liam B. Quinn	M-9137 US	2497

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EXAMINER

PAN, YUWEN

ART UNIT

PAPER NUMBER

2682

DATE MAILED: 02/23/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/768,072

Applicant(s)

QUINN ET AL.

Examiner

Yuwen Pan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 19-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 19-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. The Examiner acknowledges that claims 1 and 12-15 are amended in order to overcome the prior art of record, claim 16, 18 are cancelled.
2. Applicant's arguments filed 12/8/03 have been fully considered but they are not persuasive. The applicant asserts that prior art of record doesn't teach the new limitation "means for prioritizing selection of a type of communication technology". The Examiner respectfully disagrees because Vaisanen lucidly teaches means for prioritizing selection of a type of communication technology (see column 5 and lines 14-26).
3. Applicant's arguments with respect to claims 14-21 have been considered but are moot in view of the new ground(s) of rejection.

DETAILED ACTION

Claim Objections

4. Claim 17 objected to because of the following informalities: claim 17 is a dependent claim of cancelled claim 16. Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1,8-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Vaisanen et al (US006560443B1).

With respect to claim 1, Vaisanen discloses a portable computing system with selectable transceiver switching (see column 1 and line 8-14) comprising:

A set of one or more transceivers, each of the transceivers with a unique communication protocol (see column 3 and line 61-column 4 and line 29),

A switch capable of differentiating communication signals and determining and choosing an appropriate transceiver from the set of transceivers to communicate for the computing system (see figure 1, column 6 and lines 36-53);

A multi-band antenna capable of receiving and transmitting varying frequency signals to the chosen transceiver (see column 6 and lines 54-65); and

Means for prioritizing selection of a type of communication technology (see column 5 and lines 14-26).

With respect to claims 8-10, Vaisanen doesn't explicitly disclose selection of a transceiver is performed by a software driver with a higher level protocol stack and the software driver is instructed by a set of software application of the portable computer system. However, it is inherent that a switching functionality must be programmed within a chip or a processor, viz. by creating a user interface, the software, to further monitor and control the selection of multi-mode.

With respect to claim 11, Vaisanen further discloses the set of transceiver and the switch are integrated into a circuit card (see figure 4 and column 8 and lines 38-60).

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7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaisanen et al (US006560443B1).

Vaisanen doesn't disclose that the switch is a zener diode or a current limiter device that differentiates upon power transmission. The examiner takes "Office Notice" that it is notoriously well known in the art to utilize a zener diode as a switch, in order to activate or deactivate a transmit mode.

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to utilize a zener diode as a switch such that a transmit mode would be selected or deselected based on the input voltage.

9. Claims 3,5-7,12-15,19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaisanen et al (US006560443B1) in view of Dvorkin et al (US006249686B1).

With respect to claim 3, Vaisanen et al doesn't teach an active power sensor device. Dvorkin discloses an active power sensor device (see figure 1 and item 78, column 2 and lines 33-47). It would have been obvious to one ordinary skill in the art at the time the invention was made to enclose the active power sensor device such that adequate signal strength would be implemented.

With respect to claims 5-7, Dvorkin further discloses a lookup table that associated transmission power with each of the transceivers, whereby the switch selects a transceiver from

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the set of transceivers when a certain power state in the lookup table is detected and the switch selects a transceiver based on a transmitted or received power (see column 2 and lines 1-47).

With respect to claims 12 and 13, Vaisanen further discloses the circuit card connects to a system board of the portable computer system and the circuit card is a mini PCI card (see column 5 and lines 35-55).

With respect to claims 14 and 15, 19-21, Dvorkin discloses a method of switching between a set of one or more transceivers within a portable computing system (see column 1 and lines 7-20) comprising:

Looking up in a state table corresponding power and frequency values (see column 1 and line 64-column 2 and line 15)

Comparing the characteristic of a signal received signal to the corresponding power and frequency value, and

Selecting a transceiver board capable of processing the received signal (see column 2 and lines 1-26).

It is inherent that the frequency and power of transmitting signal would be adjusted to corresponding receiving signal such that two-way communication is completed within in the same mode (see column 2 and line 41-47).

It is inherent that a switching functionality must be programmed within a chip or a processor, viz. by creating a user interface, the software, to further monitor and control the selection of multi-mode (see column 9 and lines 8-20).

Dvorkin doesn't disclose that means for prioritizing selection of a type of communication technology.

Vaisanen lucidly teaches means for prioritizing selection of a type of communication technology (see column 5 and lines 14-26).

It would have been obvious to one ordinary skill in the art at the time the invention was made to combine the teaching of Vaisanen with Dvorkin's device such that the mobility of the portable computing device is enhanced.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yuwen Pan whose telephone number is 703-305-7372. The examiner can normally be reached on 8-5 M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 703-308-6739. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Yuwen Pan
February 11, 2004


LEE NGUYEN
PRIMARY EXAMINER